Notice of Allowability	Application No.	Applicant(s)	
	10/658,565	WANG ET AL.	
	Examiner	Art Unit	
	Adam R. Giesy	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9/8/2003*.

2. ☒ The allowed claim(s) is/are *1-7*.

3. ☒ The drawings filed on *08 September 2003* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 1-7 are allowable over prior art of record.

Independent claim 1 is allowable since the claim recites a method for dynamically measuring thermal drift of a head suspension in a hard drive that writes two tracks and finds the difference in their track centers to determine the thermal drift. The closest prior art by Ayabe (US Pat. No. 5,822,139) discloses a method of detecting thermal asperity error in a magnetoresistive head by using the error position of the track (see abstract). Ayabe does not disclose that the thermal drift is determined dynamically from the difference in measured track centers of two separate tracks.

Claims 2-3 are allowed as being dependent upon the aforementioned independent claim 1.

Independent claim 4 is allowable since the claim recites a method for dynamically measuring thermal drift of a head suspension in a hard drive that writes two tracks and finds the difference in their amplitudes to determine the thermal drift. The closest prior art by Ayabe (US Pat. No. 5,822,139) discloses a method of detecting thermal asperity error in a magnetoresistive head by using the error position of the track (see abstract). Ayabe does not disclose that the

thermal drift is determined dynamically from the difference in measured amplitudes of two separate tracks.

Claim 5 is allowed as being dependent upon the aforementioned independent claim 4.

Independent claim 6 is allowable since the claim recites a method for dynamically measuring thermal drift of a head suspension in a hard drive that writes two tracks and finds the difference in their amplitudes to determine the thermal drift. The closest prior art by Ayabe (US Pat. No. 5,822,139) discloses a method of detecting thermal asperity error in a magnetoresistive head by using the error position of the track (see abstract). Ayabe does not disclose that the thermal drift is determined dynamically from the difference in measured amplitudes of two separate tracks, or that the in-plane thermal drift is determined dynamically from the difference in measured track centers.

Claim 7 is allowed as being dependent upon the aforementioned independent claim 6.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Chiao et al. (US Pat. No. 5,535,069) discloses a system of checking the written track periodically and adjusting the track center in order to accommodate for thermal drift.

b. Schaff et al. (US Doc. No. 2003/0030934 A1) discloses a thermal asperity detector that is used to ensure track stability.

c. Malone (US Pat. No. 6,335,840 B1) discloses a thermal asperity detector that is used to detect errors in the servo track of a hard drive.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (703) 306-4080. The examiner can normally be reached on 8:00am- 4:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (730) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARG 2/2/2005

W. R. YOUNG
PRIMARY EXAMINER